Section 211 prohibits U.S. Attorneys from holding additional responsibilities that exempt U.S. Attorneys from statutory residency requirements.

Section 212 permits up to 2 percent of grant and reimbursement program funds made available to the OJP to be used for training and technical assistance and permits up to 2 percent of grant funds made available to that office to be used for criminal justice research, evaluation, and statistics by the NIJ and the Bureau of Justice Statistics.

Section 213 provides cost-share waivers for certain DOJ grant programs.

Section 214 waives the requirement that the Attorney General reserve certain funds from amounts provided for offender incarceration.

Section 215 prohibits funds, other than funds for the national instant criminal background check system established under the Brady Handgun Violence Prevention Act, from being used to facilitate the transfer of an operable firearm to a known or suspected agent of a drug cartel where law enforcement personnel do not continuously monitor or control such firearm.

Section 216 places limitations on the obligation of funds from certain Department of Justice accounts and funding sources.

Section 217 allows certain funding to be made available for use in Performance Partnership Pilots.

Section 218 establishes reporting requirements for certain Department of Justice funds.

Section 219 provides for humanitarian expenses incurred from illness, injury, or death while on duty for certain Department of Justice personnel.

Section 220 prohibits funds in this act from being used to conduct, contract for, or otherwise support, live tissue training, unless the Attorney General issues a written, non-delegable determination that such training is medically necessary and cannot be replicated by alternatives. Should additional funding be needed for humane medical simulation, the Department should request this as part of components' budget submissions.

Section 221 designates the facilities of the FBI at Redstone Arsenal, Alabama, as the ''Richard Shelby Center for Innovation and Advanced Training.''

TITLE III

SCIENCE

Office of Science and Technology Policy

The agreement includes $7,965,000 for the Office of Science and Technology Policy (OSTP).

Federal Climate Action Plans.—The agreement adopts House language on ''Climate Change Adaptation'' and directs OSTP to undertake this work from within available funds.

National Space Council

The agreement includes $1,965,000 for the activities of the National Space Council.

Quarterly Briefings.—The National Space Council is directed to continue to provide quarterly briefings to the Committees on its activities.

National Aeronautics and Space Administration

The agreement includes $25,383,701,000 for the National Aeronautics and Space Administration (NASA), of which $367,000,000 is included in division N. NASA shall continue to follow directives contained in the explanatory statement accompanying division B of Public Law 116–260 under the headings ''Quarterly Launch Schedule'' and ''Oversight and Accountability.'' Additionally, as the relationship between NASA and its commercial partners deepens, NASA should seek to retain ownership of technologies, scientific data and discoveries made using public funds. Finally, as stated in the House report, GAO is directed to continue its review of NASA's programs or projects that are expected to have an estimated life-cycle cost over $250,000,000.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

(In thousands of dollars)

Program	Amount
Science:	
Earth Science	$2,195,000
Planetary Science	3,200,000
Astrophysics	1,510,000
Heliophysics	805,000
Biological and Physical Science	85,000
Total, Science	7,795,000
Aeronautics	935,000
Space Technology	1,200,000
Exploration:	
Orion Multi-purpose Crew Vehicle	(1,338,700)
Space Launch System (SLS) Vehicle Deployment	(2,600,000)
Exploration Ground Systems	(799,150)
Artemis Campaign Development	(2,600,300)
Total, Exploration	7,468,850
Space Operations	4,250,000
Science, Technology, Engineering, and Mathematics (STEM)	143,500
Safety, Security and Mission Services	3,129,451
Construction and Environmental Compliance and Restoration	*414,300
Office of Inspector General	47,600
Total, NASA	$25,383,701

*Includes $367,000,000 in emergency funding provided in division N.

SCIENCE

The agreement includes $7,795,000,000 for Science and directs NASA to provide funding as described in the table above and text below. NASA is expected to continue making progress on the recommendations of the National Academies' decadal surveys now and in the future. NASA should also ensure that its merit review systems encourage principal investigators (PI) to use commercial orbital and sub-orbital platforms.

Earth Science.—In lieu of the funds designated in the House report for Earth Science, the agreement provides no less than the request level for the Plankton, Aerosol, Cloud, ocean Ecosystem (PACE) and NASA–ISRO Synthetic Aperture Radar missions. The agreement also provides up to the request level for Airborne Science, Earth System Explorers, and Computing and Management.

Earth Systems Observatory Missions.—NASA shall submit, concurrent with its fiscal year 2024 budget submission, the estimated costs, by fiscal year, and schedules for each of the first four designated observables missions. NASA should plan to competitively select future missions. An increase in competed, PI-led missions will encourage responsible cost and schedule constraints, develop novel remote sensing technologies, and leverage the talents and expertise of scientists at universities and research institutions.

Venture Class Missions.—In lieu of the House funding, the agreement provides up to $194,500,000 for Venture Class missions and reminds NASA to ensure mission classification is appropriately distributed across all levels of risk. NASA is encouraged to set aside funding for educational payloads.

GeoCarb.—The agreement provides $20,000,000 for the GeoCarb mission to support completion of the spectrograph and other close-out work. To the extent practicable, NASA should work with the mission PI to use remaining funds to secure delivery of all subsystems for the instrument with full documentation delivered in fiscal year 2023. Should the instrument be completed within remaining funds, NASA is encouraged to consider options to fly on a mission of opportunity in the future, should the opportunity arise. Further, within the funds provided, NASA is directed to mitigate the impact of mission cancellation on the PI team and to continue efforts to replace the loss of scientific data stemming from GeoCarb's cancellation.

Geosynchronous Littoral Imaging and Monitoring Radiometer (GLIMR).—The agreement includes up to the requested level for GLIMR to ensure a final confirmation review by January 31, 2023. NASA is directed to work with NOAA to ensure that GLIMR meets the requirements of the GeoXO program, as appropriate.

Small Satellite Launch.—NASA shall continue competitive processes to ensure small satellite launch opportunities, including by increasing the utilization of Venture-Class Acquisition Dedicated and Rideshare (VADR) contracting in fiscal year 2023 and beyond.

University Small Satellite Missions.—Of the funds provided for Science, NASA is directed to allocate not less than $30,000,000 for university small satellite missions.

Wildfire Detection Technologies.—The House language providing $8,000,000 to initiate concept studies to develop and demonstrate low-cost and scalable infrared sensing and other technologies for wildfire management is retained. The agreement reiterates that this funding is provided in addition to other wildfire research activity assumed in the budget request.

Remote Sensing of Marginal Ice Zones.—NASA shall report to the Committees on whether and how long-range, multi-day endurance polar monitoring Uncrewed Aircraft Systems could be utilized to address remote sensing of marginal ice zones, including recommended cost and development timetable, if appropriate.

Harmful Algal Blooms (HABs).—The agreement supports NASA's contribution, in coordination with NOAA and other Federal agencies, to monitoring and detection of freshwater HABs under section 9 of Public Law 115–423.

Joint Agency Satellite Division (JASD).—The agreement notes the important role that the JASD plays in partnering with NOAA to design, construct, and launch weather satellites that are instrumental to accurate forecasts. It is expected that as NOAA embarks on the next generation of geostationary, polar-orbiting, and space weather satellites, NASA will ensure that these flagship constellations can be delivered within cost and schedule goals.

Planetary Defense.—In lieu of the House language on funding, the agreement provides $137,800,000 for Planetary Defense, including not less than $90,000,000 for the Near-Earth Object (NEO) Surveyor mission. The agreement notes concern about NEO Surveyor's proposed launch slippage into 2028 and reminds NASA of its mandate to detect 90 percent of objects greater than 140 meters in size that threaten Earth.

Lunar Discovery.—NASA's Lunar Discovery and Exploration program shall adhere to the lunar science priorities established by decadal surveys and the National Research Council's report, ''Scientific Context for the Exploration of the Moon.'' Accordingly, the agreement includes up to $486,300,000 for Lunar Discovery and Exploration, including up to the request level for Commercial Lunar Payload Services (CLPS), $22,100,000 for the Lunar Reconnaissance Orbiter, and not less than $97,200,000 for the Volatiles Investigating Polar Exploration Rover (VIPER)

mission. Further, NASA is encouraged to leverage the resources and expertise of both private industry and universities in advancing its lunar science and exploration agenda.

Mars Sample Return.—The agreement provides no less than the request level for Mars Sample Return. In addition to the requirements of the briefing described in the House report, NASA shall brief the Committees on a year-by-year funding profile for a planned 2028 launch as well as any guardrails NASA has put in place to ensure that the Mars Sample Return mission does not continue to grow in cost while incurring launch delays. This consolidated briefing shall occur within 45 days of enactment of this act.

Mars Exploration.—The agreement provides up to $233,900,000 to support the Mars Exploration initiative.

New Frontiers.—The agreement provides up to $478,400,000 for New Frontiers, including up to the request level for Juno and not less than $400,100,000 for Dragonfly. Additionally, NASA is directed to brief the Committees within 180 days of enactment of this act on how NASA's planned investments in New Frontiers over the next five years will advance the recommendations of the 2022 Planetary Science Decadal Survey titled ''Origins, Worlds, and Life.'' Such briefing may be conducted concurrently with the briefing directed in the House language relating to the New Frontiers V development cost cap.

Planetary Exploration.—The agreement affirms the House language on ''Small Innovative Missions for Planetary Exploration (SIMPLEx),'' and encourages NASA, in its fiscal year 2024 budget submission, to continue the cadence of SIMPLEx, New Frontiers and Discovery class missions in spite of cost pressures from planetary flagship missions, including the Mars program.

Astrophysics.—The agreement provides up to the request level for Astrophysics Research, Astrophysics Future Missions, and the Hubble Space Telescope.

Astrophysics Explorers.—The agreement provides up to $245,600,000 for Astrophysics Explorers. NASA's commitment to accelerate the cadence of Astrophysics Explorers missions and to continue a new line of small Pioneer-class missions that leverage advancements in low-cost platforms such as cubesats and balloons is appreciated.

James Webb Space Telescope (JWST).—The agreement provides the requested funding level for JWST. The agreement also notes the historic nature of the images being returned by JWST and congratulates NASA on the success of the mission thus far.

Nancy Grace Roman Space Telescope.—The agreement provides $482,200,000 for the Roman Telescope. The agreement reiterates the expectation that NASA will use a $3,500,000,000 development cost cap in execution of the mission.

Science Mission Directorate (SMD) Education.—The agreement provides no less than $52,000,000 for education and outreach efforts. The agreement further supports the recommendation that the Astrophysics program continue to administer this SMD-wide education funding. The agreement encourages SMD-funded investigators to be directly involved in outreach and education efforts and support citizen science. NASA should continue to prioritize funding for ongoing education efforts linked directly to its science missions.

Stratospheric Observatory for Infrared Astronomy (SOFIA).—No less than $30,000,000 is provided for SOFIA to ensure an orderly close-out of the mission and to assist NASA staff assigned to SOFIA in transitioning to other NASA missions. The House reporting requirement is affirmed.

Astrophysics Decadal Survey.—The Astrophysics decadal survey, ''Pathways to Discovery in Astronomy and Astrophysics for the 2020s'' (Astro2020) recommended the establishment of a technology development program to mature science and technologies needed for the recommended missions beginning with those needed for a large telescope to observe habitable exoplanets. As part of its preparations for implementing the Astro2020 recommendations, NASA is expected to include appropriate funding for technology maturation in its fiscal year 2024 budget request to ensure continued Astrophysics mission success.

Heliophysics Research Range.—The agreement provides the requested level for Research Range.

Living With A Star.—The agreement provides $147,300,000 for Living With A Star, of which $73,000,000 is for the Geospace Dynamics Constellation mission.

Heliophysics Explorers.—The agreement provides $167,900,000 for Heliophysics Explorers.

Heliophysics Technology.—The agreement provides the request level for Heliophysics Technology.

Space Weather.—The agreement provides no less than $25,000,000 for Space Weather, including $2,000,000 for a center-based mechanism to support multidisciplinary space weather research, advance new capabilities, and foster collaboration among university, government, and industry participants aimed at improving research-to-operations and operations-to-research. NASA should continue to coordinate with NOAA, the National Science Foundation, and the Department of Defense to focus on research and technology that improves operational space weather forecasts and assets, including ground-based assets such as the Daniel K. Inouye Solar Telescope.

Solar Terrestrial Probes.—The agreement provides $208,000,000 for Solar Terrestrial Probes, including $26,000,000 from within current and prior year resources to continue Magnetospheric Multiscale (MMS) mission operations and $5,000,000 to continue formulation for the DYNAMIC mission as a cost-capped PI-led mission. NASA is directed to maintain operations and scientific analysis for MMS at a level that will achieve the phase two objective of night side reconnection events and issue the instrument solicitation for DYNAMIC.

Diversify, Realize, Integrate, Venture, Educate (DRIVE) Initiative.—The agreement supports the ongoing execution of the DRIVE initiative, a top priority of the National Research Council Decadal Survey, and encourages NASA to implement the goal of increasing the competitive research program to 25 percent of the Heliophysics budget request to enable the development of new technologies, including advanced computational tools, establish competitively awarded DRIVE Science Centers, support multidisciplinary research collaboration using integrated observatory data, and support early career investigators.

Heliophysics Budget Execution.—The Heliophysics Division is directed to brief the Committees quarterly on its execution, including the status of all projects in development and any solicitations expected in the next quarter. The briefing should include any solicitations that will be delayed due to perceived lack of funding.

Biological and Physical Science (BPS).—Funds provided for BPS may be used for the development and demonstration of in-situ analysis, sample preparation and handling, and specialized equipment for the next generation of microgravity science. NASA should develop and operate space-based capabilities for transformational microgravity science that advances U.S. leadership in such areas as quantum physics, thriving in deep space, and soft matter.

AERONAUTICS

The agreement includes $935,000,000 for Aeronautics. Within the Aeronautics Directorate, NASA is encouraged to accelerate research and development for next generation commercial engine technologies for electrified aircraft propulsion, including electric air flight. NASA is further encouraged to support research into additive manufacturing.

Hypersonics Technology.—The agreement includes not less than $50,000,000 for Hypersonics Technology, of which $15,000,000 shall be prioritized for opportunities for public-private partnerships, including $10,000,000 for carbon/carbon material testing and $5,000,000 to develop and mature automation of high-temperature ceramic matrix composites for material characterization, as well as other technologies that meet both NASA's strategic goals and industry needs.

Optimization of Stitched Composites.—The agreement provides $10,000,000 to facilitate technology development in stitched composites and encourages NASA to partner with industry to further NASA's goals in developing large-scale components and high-rate manufacturing techniques for use in subsonic aircraft.

Advanced Capabilities for Emergency Response Operations (ACERO).—The agreement includes $10,000,000 to begin the ACERO initiative, as proposed in the House report.

Aircraft Fuel Efficiency.—The agreement supports NASA's effort to support subsonic aircraft fuel efficiency improvements and efforts to reduce emissions as a bridge to the electrification of aircraft propulsion. The agreement encourages NASA to advance its research that will reduce fuel consumption and carbon emissions on legacy aircraft platforms, including a demonstration mission when appropriate. NASA is further encouraged to utilize cost share opportunities with industry in furthering these efforts.

Advanced Materials Research.—The agreement provides up to $7,000,000 above the request to advance university-led aeronautics materials research, such as the development of composite thermoplastic fibers. NASA is encouraged to partner with academic institutions that have strong capabilities in aviation, aerospace structures, and materials testing and evaluation.

SPACE TECHNOLOGY

The agreement includes $1,200,000,000 for Space Technology and reaffirms support for the independence of the mission directorate. The agreement also supports the Space Technology Mission Directorate's efforts to enable technologies related to in-space and additive manufacturing, thermal protection, Solar Electric Propulsion, Fission Surface Power, Archinaut-2, and artificial intelligence.

Orbital Debris Remediation.—The agreement includes up to $5,000,000 to advance early-stage technology for active debris remediation as described in the House report.

Regional Economic Development Initiative.—The agreement provides up to $10,000,000 for the Regional Economic Development Initiative.

On-orbit Servicing, Assembly, and Manufacturing 1 (OSAM–1).—The agreement provides $227,000,000 for OSAM–1, formerly known as the Restore-L/SPace Infrastructure Dexterous Robot. NASA should continue to work with private sector and university partners to facilitate commercialization of the technologies developed within the program.

Nuclear Thermal Propulsion.—The agreement provides not less than $110,000,000 for the development of nuclear thermal propulsion, of which $45,000,000 is for reactor development, $45,000,000 is for fuel materials development, and $20,000,000 is for non-nuclear

systems development and acquisition planning. NASA is encouraged to develop innovative nuclear technologies that enable a regular cadence of extended duration robotic missions to the lunar surface and Mars.

Flight Opportunities Program.—The agreement includes up to $27,000,000 for the Flight Opportunities Program, including up to $5,000,000 to support payload development and flight of K–12 and collegiate educational payloads. NASA shall continue to follow directives contained in the explanatory statement accompanying division B of Public Law 116–260 under the heading ''Flight Opportunities Program.''

Innovative Nanomaterials.—The agreement provides up to $5,000,000 to advance large scale production and use of innovative nanomaterials, including carbon nanotubes and carbon/carbon composites.

Nuclear Electric Propulsion (NEP).—The House language on ''Nuclear Electric Propulsion'' is adopted, and the agreement provides up to $15,000,000 to begin a systematic approach to NEP technology development.

Lunar Surface Power.—In addition to the reporting requirement in the House report, the agreement urges NASA to devote the resources required to ensure that lunar surface power systems, such as vertical solar arrays and fission surface power, are fully developed and prepared for deployment when the time for surface missions arrives in the mid-2020s. In lieu of the funding provided in the House report, the agreement provides up to $40,000,000 for payload development and delivery to the lunar surface via the Commercial Lunar Payload Services (CLPS) program to execute a surface power demonstration by 2026. NASA is also encouraged to identify areas of alignment between nuclear propulsion and fission surface power research.

Tipping Point and Announcement of Collaborative Opportunities (ACO).—The House direction on Tipping Point and ACO solicitations is retained, and the agreement provides up to $85,000,000 to implement these important opportunities.

In Space Additive Manufacturing Capabilities.—House language on ''Additive Manufacturing'' is adopted, and the agreement provides up to $15,000,000 for the research, development, and enhancement of in-space additive manufacturing capabilities.

Small Business Innovation Research (SBIR).—NASA shall continue to fulfill statutory obligations for SBIR funding and place an increased focus on awarding SBIR awards to firms with fewer than 50 employees.

EXPLORATION

The agreement includes $7,468,850,000 for Exploration.

Orion Multi-Purpose Crew Vehicle.—The agreement includes $1,338,700,000 for the Orion Multi-Purpose Crew Vehicle and does not include transfer authority for a portion of Orion funds to the Space Operations Mission Directorate.

Space Launch System (SLS).—The agreement provides $2,600,000,000 for SLS, of which not less than $600,000,000 is for concurrent SLS Block 1B Development, including Exploration Upper Stage development and associated stage adapter work. The agreement is supportive of fully developing the capabilities of SLS, and directs NASA to continue the simultaneous development of activities as authorized under sections 302(c)(1)(a) and (b) of Public Law 111–267. Further, as NASA continues to refine its strategy for a sustainable presence and exploration of the lunar surface, the agreement encourages NASA to continue its exploration of a cargo variant of SLS for use in the Artemis program and for other purposes.

Exploration Ground Systems (EGS).—In lieu of the House funding for EGS, the agreement provides not less than $799,150,000 for EGS, including up to $281,350,000 for the Mobile Launch Platform-2 (ML–2), which includes half of the additional need NASA has identified since its fiscal year 2023 budget submission. NASA is expected to find the other half of the estimated need from within other resources provided without proposing reductions in Congressional priorities, both in fiscal year 2023 and beyond. The agreement also retains a provision limiting the use of funds for ML–2.

Artemis Campaign Development.—The agreement includes $2,600,300,000 for Artemis Campaign Development. Within 90 days of enactment of this act, NASA shall provide the Committees with a workforce plan that identifies, by center, the anticipated impacts to its workforce as the Artemis program transitions from development to operations and the future program, mission, and technology development assignments necessary to maintain NASA's capabilities at its centers.

Human Landing System (HLS).—The agreement provides not less than $1,485,600,000 for HLS, including the request level for Sustaining Lunar Development activities, and no less than the requested amount for the Lunar Lander office. NASA is expected to ensure redundancy and competition in the HLS program for research, development, testing and evaluation of multiple HLS systems.

Spacesuits.—The agreement provides the requested funding for Extravehicular Activity and Human Systems Mobility Program (EHP) and notes that in 2022 NASA began the process for developing the spacesuits that will be necessary for the crewed landing on the Moon and for future use in low-Earth orbit. Within the funds provided for EHP, NASA is encouraged to continue promoting redundancy and competition, including robust support for research, development, testing, and evaluation for multiple competitively awarded space suit capabilities.

Priority of Use Missions.—NASA is directed to follow the reporting requirements under the paragraph ''Priority of Use Missions'' in division B of the report accompanying Public Law 117–103.

Habitat Systems Research and Development.—As part of NASA's plan for a sustained lunar presence, NASA may need to establish a habitation systems program office as part of the Artemis program with expertise in systems engineering development and science and exploration systems integration. NASA is encouraged to continue its planning to support the launch readiness of a lunar surface habitat and establish a program office, should one become necessary.

SPACE OPERATIONS

The agreement provides $4,250,000,000 for Space Operations, including not less than $10,000,000 for technical activities leading to a competitively awarded U.S. International Space Station (ISS) deorbit vehicle in fiscal year 2024 to ensure the safe and controlled deorbit of the ISS at the end of its useful life.

Commercial Crew.—NASA is expected to certify a new commercial crew carrier in fiscal year 2023, bringing much-needed competition to the Commercial Crew program. NASA is encouraged to continue efforts to enhance competition to generate savings within the Commercial Crew program.

21st Century Launch Complex Program.—The agreement includes up to the fiscal year 2022 levels for the 21st Century Launch Complex Program. If NASA again does not propose funding this initiative in its fiscal year 2024 budget submission, it is expected that the agency will request sufficient funding within Construction and Environmental Compliance and Restoration to realize the full potential of all NASA-owned launch complexes in awarding funds made available through this program.

Rocket Propulsion Test Program.—The agreement provides $48,200,000 for the Rocket Propulsion Test Program and directs NASA to provide, not later than 90 days after enactment of this act, a forward-looking plan describing how NASA intends to maintain and modernize its propulsion testing facilities to address current and future testing needs. Such a plan should assess the commercial space and other benefits of test stand modifications at NASA's rocket engine test facility to enable next-generation, lox-kerosene Oxygen-Rich Staged Combustion engine test capabilities.

Space Communications.—The agreement provides up to the request level for the Communications Services Program. NASA is directed to provide a timeline for sustainment of the existing space communications network and infrastructure upgrades in its fiscal year 2024 budget request. NASA is also directed to identify adequate resources and provide a plan to address any upgrades identified in its Deep Space Network ''Road to Green'' study. NASA is directed to brief the Committees on these plans within 30 days after the enactment of this act.

Commercial Low-Earth Orbit (LEO) Development.—The agreement provides up to $224,300,000 for LEO commercialization. NASA shall continue to follow directives contained in the explanatory statement accompanying division B of Public Law 116–260 under the heading ''Commercial LEO Development.''

Human Research Program.—Crew health and safety will be integral to future crewed Moon and Mars missions, and NASA is directed to continue its research into understanding the effects of living and working in space on astronauts.

SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS ENGAGEMENT

The agreement includes $143,500,000 for Science, Technology, Engineering, and Mathematics Engagement.

Space Grant Program.—The agreement includes $58,000,000 for the Space Grant Program; directs that these amounts be allocated to State consortia for competitively awarded grants in support of local, regional, and national STEM needs; and directs that all 52 participating jurisdictions be supported at no less than $900,000 each.

Established Program to Stimulate Competitive Research (EPSCoR).—The agreement includes $26,000,000 for EPSCoR.

Minority University Research and Education Project (MUREP).—The agreement includes $45,500,000 for MUREP and continues direction contained in the explanatory statement accompanying division B of Public Law 116–260.

STEM Education and Accountability Projects (SEAP).—The agreement includes $14,000,000 for SEAP. The agreement also reflects strong support for the Competitive Program for Science, Museums, Planetariums, and NASA Visitors Centers known as ''Teams Engaging Affiliate Museums and Informal Institutions'' (TEAM II) program.

SAFETY, SECURITY AND MISSION SERVICES

The agreement includes $3,129,451,000 for Safety, Security and Mission Services.

Independent Verification & Validation (IV&V) Program.—The agreement provides $39,100,000 for IV&V. If necessary, NASA shall fund additional IV&V activities from within the mission directorates that make use of IV&V services.

Aerosciences Evaluation and Test Capabilities (AETC).—NASA is directed to report to the Committees within 30 days of enactment of this act on AETC's process for portfolio maintenance and repair decisions, as well as

near-term priority investments and maintenance that are needed to meet expected demand growth and reliable availability of these facilities. Such report should include a detailed explanation of how requested resources in each of the outyears, as shown in the fiscal year 2023 budget submission, will meet expected demand and reliable availability of these facilities.

NASA Community Projects/NASA Special Projects.—Within the appropriation for Safety, Security and Mission Services, the agreement provides funds for the following projects:

NASA COMMUNITY PROJECTS/
NASA SPECIAL PROJECTS

Recipient	Project	Amount
Houston Independent School District	Houston-Rice Planetary Project	$1,983,320
American Museum of Natural History	Planetarium Programming Development	1,500,000
Virginia Air and Space Center	STEMConnect: NASA STEM Literacy & Community Enrichment	687,680
Central Allegheny Challenger Learning Center	Central Allegheny Challenger Learning Center	1,495,000
Cuyahoga Community College District	Cleanroom Classroom Laboratory Equipment	195,000
Mingo County Redevelopment Authority	Mingo County Redevelopment Authority Advanced Air Mobility Education Program	2,900,000
University of Maryland, Baltimore County	Earth and Space Institute Research and Equipment	1,000,000
University of Delaware, Delaware State University	Space Education Excellence for Delaware (SEED)	900,000
Louisiana State University National Center for Advanced Manufacturing	Digital Manufacturing Technology Upgrades	2,500,000
University of New Mexico	Long Wavelength Array Technology Upgrades	983,000
Museum of Science	Building a Pathway to Belonging Pilot Project	500,000
Cosmosphere, Inc.	Support for STEM Education Programs and Galleries/ Exhibits Revitalization	3,000,000
Wichita State University	Support for Advanced Materials Research and Research Equipment at the National Institute for Aviation Research	10,000,000
New Hampshire Aerospace Defense Export Consortium Inc	Next Generation Innovation for a Resilient Supply Chain	2,307,000
Frostburg State University	Frostburg State University Regional Science Education Center	750,000

CONSTRUCTION AND ENVIRONMENTAL COMPLIANCE AND RESTORATION

The agreement includes $414,300,000 for Construction and Environmental Compliance and Restoration (CECR), of which $367,000,000 is provided in division N.

Unmet Construction Needs.—NASA is directed to include, in priority order, no fewer than the top 10 construction projects that are needed but unfunded in its fiscal year 2024 budget request, along with any unmet repairs that result from damage from wildfires, hurricanes, or other natural disasters.

OFFICE OF INSPECTOR GENERAL

The agreement includes $47,600,000 for the Office of Inspector General.

ADMINISTRATIVE PROVISIONS

(INCLUDING TRANSFERS OF FUNDS)

NASA is directed to provide any notification under section 20144(h)(4) of title 51, United States Code, to the Committees.

The agreement allows for certain transfers of funds, including special transfer authority for Exploration Ground Systems.

As in fiscal year 2022, the agreement also includes a provision providing NASA the authority to combine amounts from one or more of its Science, Aeronautics, Space Technology, Exploration, and Space Operations appropriations with amounts from the STEM Engagement appropriation to jointly fund discrete projects or activities, through contracts, grants, or cooperative agreements, that serve these purposes. NASA is directed to provide notification of the Agency's intent to award a contract, grant, or cooperative agreement that would be jointly funded under this authority, no less than 15 days prior to award.

The agreement expands the allowable uses of NASA's Working Capital Fund (WCF) and permits a transfer of funds into the WCF.

NATIONAL SCIENCE FOUNDATION

The agreement includes $9,539,011,000 for the National Science Foundation (NSF), of which $700,162,000 is included in division N.

RESEARCH AND RELATED ACTIVITIES

The agreement includes $7,629,298,000 for Research and Related Activities (R&RA), of which $608,162,000 is included under this heading in division N.

Technology, Innovation, and Partnerships.—The agreement recognizes NSF's critical role in driving U.S. scientific and technological innovation and supports the Directorate for Technology, Innovation, and Partnerships (TIP) authorized under the Research and Development, Competition, and Innovation Act (division B of Public Law 117–167).

Regional Innovation Engines (NSF Engines).—As part of the TIP Directorate, the agreement supports the Regional Innovation Engines, authorized under section 10388 of Public Law 117–167, to create regional-scale innovation ecosystems throughout the United States and help spur economic growth by bringing together the science and technology research enterprise and regional-level resources to promote long-term national competitiveness. In implementing the NSF Engines, the Foundation is encouraged to coordinate with the EDA Regional Technology Hubs program.

Climate Science and Sustainability Research.—The agreement provides not less than $970,000,000 for climate science and sustainability research through the U.S. Global Change Research Program and Clean Energy Technology.

Artificial Intelligence (AI).—The agreement provides up to $686,000,000 to support AI-related grants and interdisciplinary research initiatives. House language on ''Artificial Intelligence'' is adopted, and the agreement reiterates the encouragement for NSF to invest in the ethical and safe development of AI and to continue the expansion of the National AI Research Institutes. Finding availability for computing time for AI research can be challenging and cost-prohibitive for principal investigators, therefore NSF is encouraged to find effective paths for academic researchers to purchase compute time on high-end cloud computing for machine learning in order to increase academic AI research capabilities and competitiveness. In addition, NSF is encouraged to continue its efforts in workforce development for AI and other emerging technologies, including education programs for non-computer science students, with focused outreach to community colleges, Historically Black Colleges and Universities, Hispanic Serving Institutions, Tribal Colleges and Universities, and Minority Serving Institutions, including by supporting partnerships and cooperative agreements.

NSF is encouraged to partner with non-governmental organizations, academic institutions (with special consideration given to Minority Serving Institutions), and other Federal agencies, including NIST, to fund research on algorithmic bias in AI, machine learning, and intelligent systems and its impacts on decisions related to employment, housing, and creditworthiness and to develop methods, tools, and programs for resolving bias within an algorithm.

Quantum Information Science.—The agreement provides $235,000,000 for quantum information science research, including $185,000,000 for activities authorized under section 301 of the National Quantum Initiative Act (Public Law 115–368) and $50,000,000 for National Quantum Information Science Research Centers, as authorized in section 302 of that act.

Historically Black Colleges and Universities Excellence in Research (HBCU–EiR).—The agreement provides $25,000,000 for the HBCU–EiR program.

Established Program to Stimulate Competitive Research (EPSCoR).—In recognition that the success of our Nation's research enterprise relies on success in every State, the agreement reinforces the Research and Development, Competition, and Innovation Act (Public Law 117–167) requirements that, to the maximum extent practicable, 15.5 percent of NSF research funding and 16 percent of scholarship funding go to EPSCoR States in fiscal year 2023. To help achieve these targets, the agreement provides no less than $245,000,000 for the EPSCoR program. Within the amount provided, no more than 5 percent shall be used for administration and other overhead costs. NSF is encouraged to support projects in EPSCoR States across all funding initiatives and centers, including Regional Innovation Engines, Mid-Scale Research Infrastructure awards, and Science and Technology Centers.

Growing Research Access for Nationally Transformative Equity and Diversity (GRANTED).—The agreement supports NSF's new GRANTED initiative that will provide assistance to mitigate the barriers to competitiveness at underserved institutions within the Nation's research enterprise. NSF is encouraged to leverage its expertise to ensure institutions participating in GRANTED are able to implement best practices in order to increase the likelihood of award success through increased research capacity.

Infrastructure Investments.—Unless otherwise noted, within amounts provided, NSF is directed to allocate no less than the fiscal year 2022 enacted levels to maintain its core research levels, including support for existing scientific research laboratories, observational networks, and other research infrastructure assets, such as the astronomy assets, the current academic research fleet, federally-funded research and development centers, and the national high performance computing centers.

Astronomy.—NSF is encouraged to provide appropriate levels of support for operating its current facilities, developing instrumentation, and preparing for investments in future world-class scientific research facilities. As such, the agreement provides up to $30,000,000 for NSF to support the design and development of next generation astronomy facilities recommended in the ''Decadal Survey on Astronomy and Astrophysics 2020'' (Astro2020). NSF is also expected to support a balanced portfolio of astronomy research grants by scientists and students engaged in ground-breaking research. As NSF develops plans for realizing Astro2020, the Foundation shall provide regular briefings to the Committees on its progress.

Scientific Facilities and Instrumentation.—The agreement supports the continuation of operations at the Daniel K. Inouye Solar Telescope (DKIST) and the Very Long Baseline Array (VLBA) receivers and provides no less than the fiscal year 2022 enacted funding levels for these facilities. In addition, the agreement fully funds the maximum operating capacity of the Center for High Energy X–Ray Science (CHEXS). NSF is also directed to continue working with the National Solar Observatory and the academic community to ensure the Richard B. Dunn Solar Telescope and its associated instrumentation remain available for continued research.

Green Bank Observatory (GBO).—The agreement supports NSF's effort to develop multi-agency plans at GBO and provides no less than the requested level to support operations and maintenance at GBO through multi-agency plans, or directly through the Foundation.

Mid-Scale Research Infrastructure.—The agreement provides up to the request level for the Mid-scale Research Infrastructure program.

Academic Research Infrastructure.—The agreement recognizes there is considerable support for academic research infrastructure construction and modernization across all directorates. Therefore, NSF is encouraged to evaluate its requirements for facilities programs that provide the academic and research community support for access to critical research facilities and platforms to ensure that the programs benefit broad and diverse segments of the science and technology community.

In particular, NSF is encouraged to support the construction or acquisition of local-class research vessels through the Major Research Infrastructure program or Mid-scale Research Infrastructure that will provide outstanding experiential, place-based education and to support innovative research and educational programs focused on understanding and sustaining the near-coastal marine and estuarine environments.

Biological Infrastructure.—NSF is directed to review its biological infrastructure investments and develop a plan for how to review their impact and to consider what other mechanistic approaches could give NSF more flexibility to evaluate and maintain critical infrastructure during its useful life.

Understanding Rules of Life.—The agreement supports NSF's focus on the Understanding Rules of Life research, including in plant genomics, and directs NSF to continue to advance the ongoing plant genomics research programs, to further its work in crop-based genomics research, and to maintain a focus on research related to crops of economic importance.

ures and fishery resource disasters declared by the Secretary of Commerce.

DEPARTMENT OF JUSTICE

Federal Prison System

buildings and facilities

For an additional amount for ''Buildings and Facilities'', $182,000,000, to remain available until expended.

SCIENCE

National Aeronautics and Space Administration

construction and environmental compliance and restoration

For an additional amount for ''Construction and Environmental Compliance and Restoration'' for repair and replacement of National Aeronautics and Space Administration facilities damaged by Hurricanes Ian and Nicole or scheduled for derating due to deterioration, $189,400,000, to remain available until expended.

For an additional amount for ''Construction and Environmental Compliance and Restoration'', $367,000,000, to remain available until September 30, 2028.

National Science Foundation

research and related activities

For an additional amount for ''Research and Related Activities'' for necessary expenses related to damage to research facilities and scientific equipment in calendar year